City of Rancho Santa Margarita Major Traffic Studies Format and Data Requirements 8/02

Traffic Studies required by the City shall comply with the following format and data requirements:

- **Title Sheet.** To include Project Title; and, name, address, telephone number, fax number, and E-mail address of Firm conducting study; and, study advocate; and, the Firm's Project Manager or contact person.
- Table of Contents. Shall include and identify by page number, the seven required report sections: Introduction and Summary, Area Conditions, Projected Traffic, Traffic Analysis, Construction Issues, On-site Review and Conclusion and Recommendations.
- **Appendices.** Shall include descriptions, work sheets, calculations, data, etc.
- List of Exhibits. Listed by subject, exhibit number and page.
- List of Tables. Optional. May be included with exhibits.
- **Purpose of Report and Study Objectives.** A brief description of the report's purpose and what information the report is anticipated to determine.
- Executive Summary. A brief summary of the Project, principal findings, recommendations and associated impacts and cost. The Executive Summary may be a separate document.
- Area Conditions. Map(s) or exhibits identifying the Study Area, study intersections and study street segments inclusive of lane geometrics and traffic volumes.

The City circulation element shall also be included as an exhibit in this report section.

The City Traffic Engineer shall provide Firm with study intersections and street segments.

Anticipated Traffic Characteristics

- 1) The Project study, including Project Alternatives, shall include:
 - a) Daily and Peak Hour (Pk. Hr.) Traffic Generation Rates are applicable to the Project. The Traffic Generation Rates shall be based on the

Institute of Transportation Engineers (ITE) <u>Trip Generation</u>, current edition, or, San Diego Traffic Generators (SANDAG), current edition, or other as prior approved by the City Traffic Engineer.

Traffic volume characteristics for year 2025 analysis shall be determined from the Orange Country Transportation Analysis Model (OCTAM 3.1) or alternative method with prior approval of the City Traffic Engineer.

- b) Trip Distribution as determined by or approved by the City Traffic Engineer.
- c) Modal Split
- d) Trip Assignment
- e) Prior Approved Project. If a prior project has been approved for the current study site and the resultant traffic and transportation findings incorporated into the City General Plan or used in conjunction with a prior approved significant traffic, transportation or land use study, the current Project traffic estimate may be considered, for evaluation purposes, as the difference between the two studies.
- 2) Identify and incorporate into Project study data as applicable:
 - a) Approved or anticipated Capital Improvement Projects ("CIP") in or impacting the Study Area for the 2007 and 2025 study years.
 - b) Approved development projects in or impacting the Study Area for the 2007 and 2025 study years. ("Development")
- Traffic Analysis. The Traffic Analysis for the Project and Project Alternative, if applicable, shall denote the study intersection or street segments by legs, existing traffic control, approach lanes by number and function, the AM and PM Pk. Hr. I.C.U. and for the AM and PM Pk. Hr. L.O.S. for each of the following conditions or as otherwise specified by the City Traffic Engineer:
 - 1) Existing condition (Current year)
 - 2) Existing plus Project
 - 3) Year 2007 without Project and with cumulative development and CIP improvements.
 - 4) Year 2007 with Project and with cumulative development and CIP improvements.

- 5) Year 2025 without Project and with cumulative development and CIP improvements.
- 6) Year 2025 with Project and with cumulative development and CIP improvements.

The Traffic Analysis shall also include:

- 1) A definition/explanation of Intersection Capacity Utilization (ICU) and Level of Service (LOS).
- 2) Level of Service "A" through "D" is considered acceptable by the City of Rancho Santa Margarita. Each scenario shall be evaluated to determine if the LOS is within the acceptable range. If the LOS exceeds "D", mitigation to achieve an acceptable LOS shall be addressed.
- 3) The County of Orange Growth Management Program (GMP) guidelines state that Project traffic volumes resulting in a 1% increase in the Volume/Capacity ratio of a deficient intersection (LOS E or F) as compared to the No Project condition is considered significantly impacted and mitigation measures are required to reduce the Project impact to a level of insignificance.

If applicable, these intersections shall be separately identified, the Pk Hr ICU's with and without the Project identified and the ICU increase per intersection per time period expressed as a percentage increase. Mitigation proposed per City requirements will normally satisfy the GMP requirement.

The County Congestion Management Program and Growth Management Program require that a Project contribute a prorated share for mitigation improvements.

- 4) Intersections or street segments not under the jurisdiction of Rancho Santa Margarita shall be addressed on an individual basis.
- **Construction Issues.** Identify any impacts (material hauling, hours of construction, traffic restrictions, traffic management plans, proximity to schools, etc.) that may require additional study or mitigation.
- **On-Site Review.** Identify any on-site traffic design features or operational characteristics that should be specifically reviewed or further analyzed.
- **Conclusion and Recommendations.** Summarize report findings and recommendations per study intersection and/or street segment.

The City Engineer and City Traffic Engineer may, depending on conditions and circumstances, adjust the perameters, of any traffic analysis required to be performed within the City. Such changes shall be documented and forwarded to all reviewing City departments.

Procedurally, the Firm shall schedule and meet with the City staff to discuss and determine the various aspects of the traffic analysis before the actual study proceeds. The results of this meeting (s) shall be documented by the Firm and submitted for approval to the City.

The Firm shall submit two draft copies of the Project report for staff review and six copies of the final report; one unbound reproducible and five bound copies.